

Notice of Allowability

Application No.

09/850,040

Examiner

Ramnandan Singh

Applicant(s)

CARTER ET AL.

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to April 13, 2007.
2. ☒ The allowed claim(s) is/are 1-5,8-18,22-29,31 and 32.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

1. This action is in response to applicant's response filed on April 13, 2007. **Claims 1-5, 8-18, 22-29, 31-32** are pending in the present application.

2. EXAMINER'S AMENDMENT/COMMENT

Applicant has agreed to the following amendment during his telephonic interview with the Examiner held on April 25, 2007:

In the claims:

- (i) Claims 6-7 and 19-21 are cancelled.
- (ii) Claim 1, line # 6, after "amplitudes"—of sounds—has been inserted.
- (iii) Claim 2, line # 6, after "amplitudes"—of sounds—has been inserted.
- (iv) Claim 3, line # 6, after "amplitudes"—of sounds—has been inserted.
- (v) Claim 4, line # 6, after "amplitudes"—of sounds—has been inserted.

(vi) Claim 25, line # 6, after “amplitudes”—of sounds—has been inserted.

The Interview summary is enclosed.

REASONS FOR ALLOWANCE

3. The following is an examiner’s statement of reasons for allowance:

This invention relates to a computer related method of enhancing sound quality for computer telephony systems. Claim 1 identifies the uniquely distinct feature of the method, comprising: determining that noise is present by determining whether the amplitudes of the plurality of frequency bands cross a threshold. As such, claim 31 requires detecting noise in the frequency domain of digital signals by comparing amplitudes of digital signals in multiple frequency bands with a threshold. While the closest prior art, Pelaez Ferrigno [US 5,577,161 A], and Paludan-Mueller [US 20020118851 A1] each teach detecting noise, Pelaez Ferrigno detecting noise based on a signal/noise decision in a frequency domain, and Paludan-Mueller detecting noise by estimating the level of background noise in a frequency band; neither of them teaches or suggests detecting noise in the frequency domain of digital signals by comparing amplitudes of

digital signals with a threshold in multiple frequency bands. As such, the prior art, either singularly or in combination fail to anticipate or render the above underlined limitation obvious. Therefore, claim 1 is indicated allowable.

Claim 2-4, 12-13, 16, 22, 25, 27 and 31 are essentially similar to claim 1 and are indicated allowable.

4. The claims have been re-numbered as follows:

CLAIMS NUMBER (ORIGINAL)	CLAIMS NUMBER (FINAL)
1	1
8-11	2-5
2-5	6-9
12-18	10-16
22-29	17-24
31-32	25-26

Claim no. 1 along with figure number 4 will be published in the Official Gazette.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramnandan Singh whose telephone number is (571) 272-7529. The examiner can normally be reached on M-TH (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ramnandan Singh
Examiner
Art Unit 2614

A handwritten signature in black ink, appearing to read 'R Singh', with a horizontal line underneath.